Version with Markings to Show Changes Made

In the Specification

Page 1, paragraph 1 (AMENDED)

This invention relates to a novel cephem compound having excellent antibacterial activities on a broad range of Gram-positive and Gram-negative bacteria, especially **[Staphylococcus aureus]** ***Staphylococcus aureus***, methicillin-resistant **[Staphylococcus aureus]** ***Staphylococcus aureus*** (MRSA) and a bacteria belonging to **[Pseudomonas]** ***Pseudomonas*** and being sufficiently water-soluble, to a method of producing the compound and to a medicine, especially an antibacterial composition containing the compound.

Page 24, paragraph 3 (AMENDED)

Examples of the acid scavenger include, for example, an inorganic base such as sodium carbonate, potassium carbonate, **[calucium]** **calcium** carbonate, sodium **[hydrogencarbonate]** **hydrogen carbonate**, etc., a tertiary amine such as triethylamine, tri-(n-propyl)amine, tri-(n-butyl)amine, diisopropylethylamine, cyclohexyldimethylamine, pyridine, lutidine, γ-collidine, N,N-dimethylaniline, N-methyl piperidine, N-methylpyrrolidine, N-methylmorpholine, etc., an alkylene oxide such as **[proylene]** **propylene** oxide, epichlorohydrin etc., etc.

In case that R^1 is a hydrogen atom and a phosphono group is introduced when **the** reaction derivative forms, the reaction mixture containing reaction product wherein R^1 is a dihalophosphoryl group, may be deprotected by treating with water to obtain a compound (I) wherein R^1 is a phosphono group, or may be treated with an an alkanol such as methanol, ethanol, etc., to obtain a compound (I) wherein R^1 is an esterified phosphono group.

Production method (2):

Page 26, paragraph 2 (AMENDED)

The present method can be carried out, for example, by treating Compound (Ic) with an acid. The acid may be an organic acid or an inorganic acid. Preferable examples of the acid include, for example, formic acid, sulfuric acid, trifluoroacetic acid, benzenesulfonic acid, nitric acid, **[P-toluenesulfonic]** **p-toluenesulfonic** acid, hydrochloric acid, etc. More preferable examples of the acid include, for example, formic acid, trifluoroacetic acid, hydrochloric acid, etc. The acid suitable for the reaction is selected by taking the group which is hydrolyzed into consideration. The reaction can be carried out with or without a solvent. Examples of the suitable solvent include an organic solvent, water, mixed solvent thereof, etc., which is usually used as a solvent. When trifluoroacetic acid is used, the reaction is preferably carried out in the presence of anisole.

Production method (4)

Page 34, paragraph 4 (AMENDED)

The compound (I) of this invention has broad spectrum antibacterial activity and low toxicity, and can be used safely for prophylaxis and therapy of various diseases, in man and mammals (e.g. mouse, rat, rabbit, dog, cat, cow and pig), caused by pathogenic bacteria, for example, respiratory infection and urinary tract infection. Characteristic features of the antibacterial spectrum of the antibacterial compound (I) are as follows, among others:

(1) showing a remarkably high activity against a variety of Gram-negative bacteria,

(2) having high activities against Gram-positive bacteria (e.g. **[Staphylococcus aureus]** ***Staphylococcus aureus*** and **[Corynebacterium diphtheriae]** ***Corynebacterium diphtheriae***),

(3) having high activities against methicillin-resistant **[Staphylococcus aureus]** ***Staphylococcus aureus*** (MRSA), and

(4) having high activities also against a number of β-

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lactamase-producing Gram-negative bacteria (e.g. genera **[Escherichia]** ***Escherichia***, **[Enterobacter]** ***Enterobacter***, **[Serratia]** ***Serratia*** and **[Proteus]** ***Proteus***). The anti-bacterial compound (I) of the present invention has superior stability and effectiveness of anti-bacterial activity in comparison with Compound (V).

Page 35, paragraph 3 (AMENDED)

Though the drug of the present invention may comprise only Compound (I) itself, it is usually prepared by a conventional manner by using a proper amount of pharmaceutically acceptable carriers, diluents and bulking agents, etc. which are selected from exipients (for example, **[calucium]** **calcium** carbonate, kaolin, sodium **[hydrogencarbonate]** **hydrogen carbonate**, lactose, **[D-mannnitol,]** **D-mannitol,** starch, **[crystaline]** **crystalline** cellulose, talc, fine granulated sugar, porous substance, etc.), binders (for example, dextrin, gums, α-starch, gelatine, hydroxypropylcellulose, hydroxy propyl methyl cellulose, pullulan, etc.), thickeners (for example, a natural gum, a cellulose derivative, an acrylic acid derivative, etc.), disintegrators (for example, carboxymethylcellulose calcium, crosscarmelose sodium, crospovidone, a low-substituted hydroxypropylcellulose, partly pregelatinized starch, etc.), solvents (for example, water for injection, alcohol, **[propyleneglycol,]** **propylene glycol,** Macrogol, sesame oil, corn oil, etc.), dispersants (for example, Tween 80, HCO60, poly ethylene glycol, carboxymethylcellulose, sodium alginate, etc.), **[solbilizing]** **solubilizing** agents (for example,

polyethylene glycol, **[propyleneglycol,]** **propylene glycol,** **[D-mannnitol,]** **D-mannitol,** benzoic acid benzyl, ethanol, tris amino methane, tri-ethanolamine, sodium carbonate, citric acid sodium, etc.), suspending agents (for example, stearyl triethanolamine, sodium **[laurylsulfate,]** **lauryl sulfate,** benzalkonium chloride, polyvinylalcohol,

Page 36, paragraph 2 (AMENDED)

The pharmaceutical composition of the present invention which may contain pharmaceutically acceptable carriers, diluents, bulking agents, etc., mentioned above contains an effective amount of Compound (I) of the present invention for the treatment and prevention **of bacterial infectious disease**. The amount of Compound (I) contained in the pharmaceutical preparation of the present invention is usually 0.1 to 100 weight % of the pharmaceutical preparation. The pharmaceutical preparation of the present invention may contain pharmaceutically active ingredients other than Compound (I)(e.g. antitumor agents, etc., mentioned below). The amount of the pharmaceutically active ingredient other than Compound (I) is not limited as long as the aim of the present invention can be achieved. Examples of the preparation includes tablets (including a sugar-coated tablet, a film-coated tablet), pills, capsules (including microcapsule), granules, fine granules, powders, drop infusions, syrups, emulsions, suspensions, injections, **[inhalations]** **aerosols**, ointments, suppositories, troches, cataplasms, sustained release preparations, etc. These **[preparation]** **preparations** can be prepared by a conventional method (e.g., a method shown in The Pharmacopoeia of Japan The Twelfth Edition, etc.).

Page 43, paragraph 2 (AMENDED)

The cephem compound (I) has a broad antibacterial spectrum and an excellent antibacterial activity against Gram-negative bacteria and Gram-positive bacteria including **[Staphylococcus aureus]** ***Staphylococcus aureus*** and MRSA, and **[its]** **is** useful for treatment